

Patent Claims

1. An additional control valve device for an inlet channel of a reciprocating internal combustion engine having a valve
5 element, which is guided such that it can move reversibly in a guide (3) in the direction of the longitudinal axis between a portal magnet (1) and a trap magnet (2), in which device the magnet yoke (4) of the portal magnet (1) has at least one extension (5) which rests directly on at least one web (6),
10 which is connected to the guide (3) at its end which is remote from the extension (5).
2. The additional control valve device as claimed in claim 1, in which the at least one web (6) is arranged at right angles
15 to the longitudinal axis of the guide (3).
3. The additional control valve device as claimed in claim 1 or claim 2, in which the at least one web (6) and the guide (3) are composed of a single part.
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4. The additional control valve device as claimed in one of claims 1 to 3, in which the extension (5) forms a part of the housing (1') in the end area (5a) which rests directly on the
25 at least one web (6).
5. The additional control valve device as claimed in claim 4, in which an eye (7) is arranged at that end of the end area (5a) which is remote from the portal magnet (1).
- 30 6. The additional control valve device as claimed in one of claims 1 to 5, in which the at least one web (6) has a first horizontal stop (8) and a second vertical stop (9) for the extension (5) at its end which is remote from the guide (3).

7. The additional control valve device as claimed in claim 6,
in which the first horizontal stop (8) and the second vertical
stop (9) have a common edge, and the extension (5) has a groove
(10), which is designed to be complementary to the first
5 horizontal stop (8) and to the second vertical stop (9), at its
end which is remote from the portal magnet (1).